IN THE SPECIFICATION:

Please replace the paragraph on page 6, lines 11-13 with the following replacement paragraph:

B1

~~Fig. 1 is~~ Figs. 1A and 1B are a perspective view and a side, cross-sectional view, respectively, of a microelectronic spring structure according to the invention, having a relatively rigid, incompressible protruding member mounted to a substrate.

Please replace the paragraph on page 9, lines 10-22 with the following replacement paragraph:

B2

An exemplary lithographic/column composite type microelectronic spring structure 100 according to the present invention is shown in Figs. 1A and 1B. Structure 100 comprises a beam 102 having a base portion 104, a cantilevered portion 106 extending from the base portion, a tip portion 108 adjoining the cantilevered portion, and at least one free end 110. Beam 100 is preferably formed by a lithographic process, for example, by deposition of a resilient material on a sacrificial layer or substrate as described, e.g., in Serial No. 09/023,859 referenced above. As used herein, "sacrificial layer" refers to a material, such as a photoresist, that is deposited on a substrate during formation of a desired component or structure, such as a microelectronic spring component, and later removed from the substrate. "Sacrificial substrate" refers to a substrate that is attached to a desired component or structure, such as a microelectronic spring component, during its formation, and later removed from the component or structure.

Please replace the paragraph on page 10, lines 3-14 with the following replacement paragraph:

By

Any number of column elements 112, typically less than five column elements, or a single column element, may be used to secure the base portion 104 of beam 102 to substrate 116. In an embodiment of the invention, the column elements comprise a wire core 190 that is ball-bonded to substrate 116, and covered (preferably by electroplating) with a shell 192 of structural material. In the alternative, one or more post components built by a lithographic process may be used instead of the group of plated wire column elements. As used herein, "post component" generally refers to a single column element, group of column elements, or similar structure for elevating and securing beam 102 above and to substrate 116, whether comprised of a wire element, a material built by lithographic process, or some other material. Like beam 102, column elements 112 (or other post component) are typically comprised of a metallic material and are electrically conductive.

Please replace the paragraph on page 10, line 27 through page 11, line12 with the following replacement paragraph:

By

Structure 100 additionally includes a protruding member 120 disposed underneath beam 106. In the embodiment shown in Figs. 1A and 1B, protruding member 120 comprises a substantially rigid and incompressible elongate member having two ends, and is mounted at one of its ends to substrate 116 and second terminal 122. It should be understood that second terminal 122 does not necessarily need to be separate from terminal 118 and may, in fact, be formed as a part of terminal 118. Protruding member 120 is preferably formed in the same way and at the same time as column elements 112. However, protruding member 120 is preferably shorter than column elements 112, and in any case, does not contact beam 106 when structure 100 is in an undeflected position, as shown in Figs. 1A and 1B. It is particularly advantageous to form each of the column elements 112 and protruding member 120 by ball-bonding a segment of wire 190, 194 to each respective terminal 118, 122 and then plating the wire core with a structural material 192, 196. The length of protruding member 120 is then readily controlled by cutting its wire core 194 shorter than the cores 190 for column elements 112, during a wire bonding step.

Please replace the paragraph on page 11, lines 13-18 with the following replacement paragraph:

B5 For illustrative purposes, a system of coordinate axes is shown in Fig. 1A, indicating the directions of the "x," "y," and "z" axes generally used herein for describing the structures according to the invention. The "z" axis is perpendicular to the substrate, and the "x" and "y" axes are in a plane parallel to a surface of the substrate, with "x" chosen in the direction of the elongate beam 106. Figs. 2A and 2B show a side view of the structure shown in Fig. 1A, looking in the direction of the "y" axis.

Please replace the paragraph on page 20, line 18 through page 21, line 8 with the following replacement paragraph:

Fig. 9A shows a side view of an exemplary spring structure 500 with a compressible protruding member 560 in an undeflected position. Except for compressible member 560, spring structure 500 is similar to spring structure 100 shown in Fig. 1A, comprising a beam 502 having a cantilevered portion 506, and mounted at its base portion 504 to a substrate 516 and terminal B6 518, typically using columns 512. Other types of spring structures, such as structures 300 and 400 shown in Figs. 6 and 7A, may also be adapted for use with a compressible member 560. In an embodiment of the invention, as shown in Fig. 9A, beam 502 does not contact the compressible member 560 when beam 502 is in an undeflected position. In an alternative embodiment, compressible member 560 contacts or otherwise supports beam 502, when beam is undeflected, i.e., not in contact with any electrical component at its contact tip 532. In such embodiments, member 560 may cause beam 502 to deflect a short distance away from substrate 516, and increase the initial contact force exerted at tip structure 530, prior to the application of any external contact force. In either embodiment, the compressible member 560 is preferably disposed under the tip structure 530, but may also be spaced apart from the tip portion, without departing from the scope of the invention. Member 560 is shown with a substantially circular cross-section, but it should be appreciated that non-circular cross-sections, such as oval, elliptical, square, rectangular, or polygonal are also within the scope of the invention.